CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-047

NPDES NO. CA0029513

WASTE DISCHARGE REQUIREMENTS FOR:

FASS METALS COMPANY
RICHMOND
CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Fass Metals Company, hereinafter called the discharger, by application dated December 28,1988, has applied for issuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger owns a former metals recycling facility located at 818 West Gertrude Street in the City of Richmond, Contra Costa County. The site is an essentially flat parcel, with the site operations and the contaminated zone fully enclosed by fencing. Contamination of soil with PCBs and chlorobenzenes has been confirmed. Due to the nature of the business at this site, possible metals contamination in soil, groundwater and surface water is a serious concern.

3. Prior to 1978 Sacramento Municipal Utility District (SMUD) sold electrical transformers containing mineral oil to Fass Metals for recycling as scrap metal. The transformers were transported to the site by Fass Metal. The transformers were drained of oil at the site and oil was discharged or released to the ground due to handling and recycling practices. Some mineral oil transformers are now known to contain residual traces of PCBs.

4. On October 15, 1981, elevated levels of PCBs were found in soil and at the site.

5. On March 23, 1982, additional soil and transformer oil samples were collected to verify the earlier results. PCBs were found in all samples. High levels of PCBs were confirmed by

independent private laboratory analyses, and by the Department of Health Services Hazardous Materials Laboratory analyses.

6. Excavation of highly contaminated soils was undertaken as a interim remedial measure in December 1986.However, PCB contamination at up to 4,000 mg/kg remains on the site. Analysis of groundwater has consistently yielded non-detectable levels of PCBs.

7. During November 1987, soils analyses revealed volatile organic contamination including total chlorobenzenes at 294 mg/kg.

8. In February of 1986, a surface water control system was implemented to control the risk of PCB migration as a dissolved constituent in the surface water and absorbed as an oil in the suspended soil particles mobilized by the surface runoff. The surface water control system collects and temporarily stores storm water in on-site holding tanks to allow for settling of suspended soil particles. The stored surface water is then treated (via carbon adsorption) to remove PCBs to below the detection limit of 0.5 ug/l.

9. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for Central San Francisco Bay, and contiguous surface and groundwater.

10. The beneficial uses of Wildcat Creek, San Pablo Straits, San Pablo Bay and North San Francisco Bay include:

    a. Contact and non-contact water recreation
    b. Wildlife habitat
    c. Preservation of rare and endangered species
    d. Estuarine habitat
    e. Fish spawning and migration
    f. Industrial process and service supply
    g. Shellfishing
    h. Navigation
    i. Ocean commercial and sport fishing

11. The Basin Plan prohibits discharge of wastewater which has particular characteristics of concern to beneficial uses at any point where the wastewater does not receive a minimum dilution of at least 10:1 or into any non-tidal water, dead end slough, similar confined water, or any immediate tributary thereof.

12. The Basin Plan allows for exceptions to the prohibitions referred to in Finding 11 above when it can be demonstrated that a net environmental benefit can be derived as a result of the discharge.

13. Exceptions to the prohibitions referred to in Finding 11 are warranted because the discharge is an integral part of a program to clean up contaminated surface water and thereby produce and environmental benefit, and because receiving water concentrations are expected to be below levels that would effect beneficial uses. Should studies indicate chronic effects, not currently anticipated, the Board will review the requirements of this Order based upon Receiving Water Limitation B.1.e.

14. The Basin Plan prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin." The discharger's surface water treatment system and associated operation, maintenance, and monitoring plan constitutes an acceptable control program for minimizing the discharge of toxicants to waters of the State.

15. Effluent limitations of this Order are based on the Basin Plan, State plans and policies, U. S. Environmental Protection Agency guidance, and best engineering judgement as to best available technology economically achievable.

16. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

17. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

18. The Board, in a public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Fass Metals Company, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Surface water discharge shall not contain constituents in excess of the following limits:

a. Metals

	(ug/l) Daily Average
Arsenic	20
Cadmium	10
Chromium (VI)	11
Copper	20
Cyanide	25
Lead	5.6
Mercury	1
Nickel	7.1
Silver	2.3
Zinc	58

b. Others

Phenols	500
PAHs	15
PCBs (per constituent)	0.5
VOCs (per constituent)	5.0
Total VOCs	100

2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.

3. TOXICITY: The survival of test fishes in 96-hour static renewal bioassays of the discharge of the effluent shall be a median of 90 percent survival and a 90 percentile value of not less than 70% survival.

Compliance of the bioassays shall be performed using the test fish species specified in Part B of the attached Self-Monitoring Program.

B. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption whether at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be expected to be exceeded in waters of the State in any place within one foot of the water surface:

a. Dissolved Oxygen:	7.0 mg/l minimum. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause lesser concentration(s) than specified above, the discharge shall not cause further reduction in the concentration of dissolved oxygen.
b. pH	The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units.
c. Un-ionized ammonia	0.025 mg/l as N Annual Median 0.4 mg/l as N Maximum

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. Provisions

1. The discharger shall comply with all sections of this order immediately upon adoption except for compliance with Effluent Limitations A.1.a. which shall be by the following schedule:

Task	Compliance Date
Full Compliance	October 1, 1989

2. The discharger shall comply with the Self-Monitoring program as adopted by the Board and as may be amended by the Executive Officer.

3. The discharger shall also notify the Regional Board if any activity has occurred or will occur which would result in the discharge, on a frequent or routine basis, of any toxic pollutant which is not limited by this Order.

4. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986, except items A.10, B.2, B.3, C.8 and C.11.

5. This Order expires April 19, 1994. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

6. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional administrator objects to its issuance, the permit shall not become effective until

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an order adopted by the California Water Quality Control Board, San Francisco Bay Region on April 19, 1989.

STEVEN R. RITCHIE
EXECUTIVE OFFICER

Attachments:

Standard Provisions and Reporting Requirements, dated December 1986
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Fass Metals Company

Richmond, Contra Costa County

NPDES NO. CA 0029513

ORDER NO. 89-047

CONSISTS OF

PART A (dated December 1986
Mod. SBTD 1/23/87)

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

Stations	Description
I-1	At a point in the surface water treatment system immediately prior to treatment

B. EFFLUENT

Stations	Description
E-1	At a point in the surface water treatment system immediately following treatment

C. RECEIVING WATERS

Stations	Description
C-1	At a point in Wildcat Creek at least 100 feet but no more than 200 feet downstream from the flood control channel discharge.

II. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given in Table I.

III. MISCELLANEOUS REPORTING

A. If any chemical additives are proposed to be used in the operation of the treatment system it shall be reported 30 days prior to their use.

IV. MODIFICATION TO PART A

A. Deletions:

Sections D.2.e, D.2.g, D.3.b, E.1.f, E.3, and E.4.

B. Modifications:

G.4 Written reports under G.4 shall be filed in January and May.

G.4.b The report format shall be prepared in a format acceptable to the Executive Officer. The example in Appendix A is provided as guidance.

G.4.e The report format will be prepared in a format acceptable to the Executive Officer NPDES Discharge Monitoring Report, EPA Form 3320-1, is provided as guidance.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-047.

2. Was adopted by the Board on April 19, 1989.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer or Regional Board.

STEVEN R. RITCHIE
EXECUTIVE OFFICER

Attachment: Table I

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I-1	E-1	C-1
Type of Sample	G	G	G
Flow Rate (gpd)	W	W	
pH (units)		M	2/Y
Dissolved Oxygen (mg/l and % saturation)			2/Y
Un-ionized Ammonia (mg/l as N)		M	2/Y
Temperature (C)			2/Y
Fish Toxicity 96-hr. (% survival)		Y	
Priority Pollutant Scan (including metals)	M	M	2/Y

LEGEND FOR TABLE

G	= Grab Sample
W	= Once each week during the months of November to March
2/Y	= Once in November and February
Y	= Once a year
M	= Once each month during the months of November to March